

The British Lung Foundation and SILA award grant to the Hull York Medical School for sarcoidosis research

The British Lung Foundation and SILA - The Sarcoidosis Charity - have awarded a two-year research grant of £116,317 to Dr Simon Hart at the Hull York Medical School, to investigate molecules affecting monocyte function in sarcoidosis.

The rationale and background to the study are as follows: In sarcoidosis, granulomatous inflammation affects organs including the lungs. In the granulomas, cells of the immune system produce chemicals (cytokines) that drive the inflammation.

What causes sarcoidosis remains a mystery, but evidence suggests that it involves a florid immune reaction to persistent foreign (perhaps microbial) proteins. Dr Hart and his colleagues believe that studying the immune response in sarcoidosis may identify targets for specific new therapies.

Sarcoidosis commonly affects the lungs, and in some patients it is persistent or progressive. Current treatment is unsatisfactory. Corticosteroid therapy does not cure sarcoidosis but may halt or slow its progress. Relapses are common and sometimes steroids are ineffective. Dr Hart cites two key unmet needs: identification of the foreign proteins (antigens) that trigger sarcoidosis, and understanding the florid immune response to identify better, more specific targets for treatment.

Dr Hart, Senior Lecturer in Respiratory Medicine at the Hull York Medical School, explains: *“Our planned research is based on observations from our laboratory that abnormalities in the monocyte are key in sarcoidosis. In contrast, previous research has focussed on various types of lymphocytes. Our novel observation that the function of regulatory receptors on monocytes is impaired could explain what we see in sarcoidosis, because regulatory molecules normally act to dampen the immune response.*

“We aim to show whether monocyte regulatory receptors could be used to identify, early on, whether sarcoidosis is likely to worsen or improve. By extending our knowledge of the immune dysfunction in sarcoidosis, it could pave the way for clinical trials in patients of drugs that modulate novel pathways.

“Furthermore, the proposed research could help direct future research into the causes and triggers of sarcoidosis.”

In awarding the grant, the BLF noted that the research will help medical experts to better understand what drives the abnormal immune response in patients with pulmonary sarcoidosis.

In the medium term, it could provide information to support clinical trials of novel therapies that stimulate the regulatory pathways in patients with sarcoidosis. And in the long term, it is hoped the findings will provide information to support and direct future research into the cause (or causes) of sarcoidosis.

Ian Jarrold, Head of Research at the British Lung Foundation, said: *“We are delighted to be partnering with SILA to support this important research.*

“Current treatment strategies for sarcoidosis are not satisfactory. It’s therefore important to fund research into this disease in order to find more effective therapies to help people who are affected by this debilitating condition.”

About the British Lung Foundation

The British Lung Foundation is the only UK charity fighting to help the 1 in 5 people in the UK affected by lung disease, by researching new treatments, campaigning for better awareness and services, and providing support and advice for patients, carers and family members. For further information, please visit www.blf.org.uk. For help and support, call the BLF Helpline on 03000 030 555. To donate £5 to help the BLF fight lung disease, please text LUNGS to 70500.



at: www.sila.org.uk



About SILA

SILA is the UK’s national sarcoidosis charity. The three principle activities of SILA are: to raises money and fund research into sarcoidosis; to support people with sarcoidosis, their friends and family through a helpline, support groups and social media; and to publish information about the condition. Find out more about SILA